

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Jian J. CHEN et al.

Serial No. 09/821,027

Filed: March 30, 2001



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TC 1700

Group Art Unit: 1763

Examiner: A. Crowell

For: INDUCTIVE PLASMA PROCESSOR HAVING COIL WITH PLURAL WINDINGS
AND METHOD OF CONTROLLING PLASMA DENSITY

PETITION TO REQUIRE CONSIDERATION OF WITHDRAWN CLAIMS

ASSISTANT COMMISSIONER FOR PATENTS
Washington, D.C. 20231

Dear Sir:

Applicants hereby petition to require consideration of method claims 1-10 with independent apparatus claims 11 and 31, and the claims dependent thereon. The subject matter of claims 1 and 31 is not independent and distinct. The claims differ from each other only by claim 1 being a method claim and claim 31 being an apparatus claim for performing the steps of the method.

Claim 1, upon which claims 2-10 depend, is directed to a method of controlling the distribution of electromagnetic fields launched by an excitation coil to excite a plasma in a vacuum plasma processor for processing a workpiece. Claim 31 is directed to apparatus for controlling the distribution of electromagnetic fields for exciting a plasma in a vacuum plasma processor for processing a workpiece. Claim 1 requires the coil to include plural parallel connected windings for coupling electromagnetic fields to plasma in the chamber. Claim 31 requires an excitation coil for launching electromagnetic fields for exciting the plasma in the processor. Claim 31 further requires the coil to include plural parallel connected windings for coupling electromagnetic fields to plasma in the chamber. Claim 1 requires varying the total amount of power applied to the plural parallel connected windings so that for different

distributions of electromagnetic fields different amounts of total power are applied to the plural windings. Claim 31 requires a controller for varying the total amount of power applied to the plural parallel connected windings so that for different distributions of electromagnetic fields different amounts of total power are applied to the plural parallel connected windings. Claim 1 further requires varying the amount of current applied to individual plural windings so that for different distributions of electromagnetic fields, different amounts of current are applied to the individual windings. Claim 31 requires the controller to vary the amount of current applied to individual plural windings of the plural parallel connected windings so that for different distributions of electromagnetic fields different amounts of current are applied to the individual windings.

The foregoing clearly indicates the apparatus of claim 31 must perform the method of claim 1. Since it is well recognized that a machine for performing the same method which has been performed by hand is not patentable over the method, the subject matter of claims 1 and 31 is not independent and distinct from each other. Consequently, two patents should not be awarded for the subject matter of claims 1 and 31.

Applicants note that in this field, it is common for method and apparatus claims to appear in the same patent. For example, the U.S. Patent relied on by the Examiner to reject claim 31, Blalock et al., U.S. Patent 6,095,159, contains both method and apparatus claims. In fact, an examination of the independent claims of the Blalock et al. patent indicates the method and apparatus claims differ from each to a greater extent than claims 1 and 31. For example, independent method claims 1 and 14 of Blalock et al. include a selecting step. There is no corresponding step in independent apparatus claims 17 and 21 of Blalock et al.

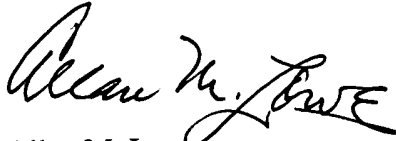
Based on the foregoing, reversal of the Examiner's decision to withdraw claims 1-10 from consideration in the present application is in order.

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Please charge any fee associated with this Petition to Account No. 07-1337 of the undersigned attorney for applicant.

Respectfully submitted,

LOWE HAUPTMAN GILMAN & BERNER, LLP

A handwritten signature in black ink, appearing to read "Allan M. Lowe". The signature is fluid and cursive, with the first name "Allan" being more prominent.

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